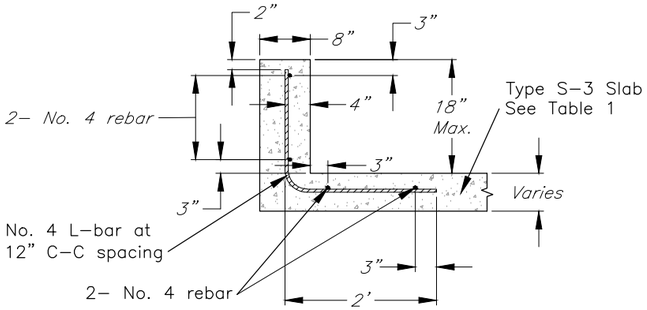
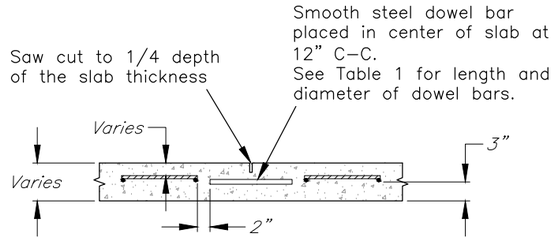


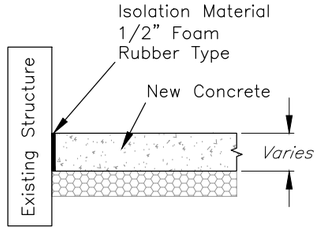
Concrete curbing shall follow joint spacing as per Table 1

CONCRETE CURBING – AS REQUIRED

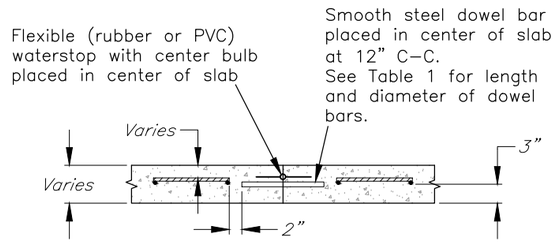
Not to Scale



S-3 CONTRACTION (CONTROL) JOINT



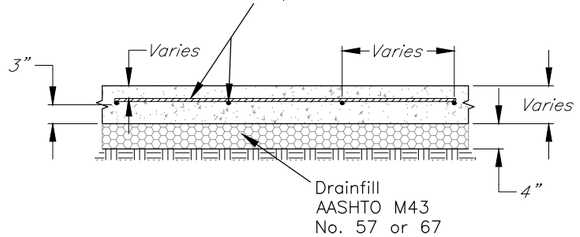
ISOLATION JOINT



WATER TIGHT CONSTRUCTION JOINT

CONCRETE JOINT DETAILS

Not to Scale



TYPICAL S-3 CONCRETE SLAB

Not to Scale

TABLE OF QUANTITIES		
Item	Unit	Quantity
Excavation	Cu. Yds.	
Granular Backfill	Cu. Yds.	
Concrete	Cu. Yds.	
Reinforcing Steel		
#4 (1/2") Rebars	Lin. Ft.	
#5 (5/8") Rebars	Lin. Ft.	
#6 (3/4") Rebars	Lin. Ft.	
Smooth Steel Dowels		
3/4" X 13"	Each	
1" X 16	Each	

TABLE 1 – S-3 CONCRETE SLAB

Contraction Joint Spacing (ft)	Reinforcement Steel		Dowel Bar Size 12 in Spacing C-C	Slab Thickness (in)	Steel Lap Splice (in)
	Steel Size	Steel Spacing (in) C-C			
20	#4	12	3/4" X 13"	5.5	16
30	#4	9	3/4" X 13"	5.5	16
40>	#4	7	3/4" X 13"	5.5	16
20	#4	11	3/4" X 13"	6.0	16
	#5	12	3/4" X 13"	6.0	19
30	#4	8	3/4" X 13"	6.0	16
	#5	12	3/4" X 13"	6.0	19
40>	#4	6	3/4" X 13"	6.0	16
	#5	10	3/4" X 13"	6.0	19
20	#4	10	3/4" X 13"	6.5	16
	#5	12	3/4" X 13"	6.5	19
30	#4	7	3/4" X 13"	6.5	16
	#5	11	3/4" X 13"	6.5	19
	#6	12	3/4" X 13"	6.5	23
40>	#4	6	3/4" X 13"	6.5	16
	#5	9	3/4" X 13"	6.5	19
	#6	12	3/4" X 13"	6.5	23
20	#4	9	1" X 16"	7.0	16
	#5	12	1" X 16"	7.0	19
30	#4	7	1" X 16"	7.0	16
	#5	11	1" X 16"	7.0	19
	#6	12	1" X 16"	7.0	23
40>	#4	5	1" X 16"	7.0	16
	#5	8	1" X 16"	7.0	19
	#6	12	1" X 16"	7.0	23

Steel spacing shall not exceed 12" center to center (C-C)

DESIGN MIX CERTIFICATION

The contractor shall be responsible for the design of the concrete mix and for providing a letter certifying that the concrete materials and mix proportions (including admixtures if used) will provide the required compressive strength and include evidence satisfactory to the Engineer that the materials and proportions will produce concrete conforming to NRCS specification Exhibit OH17-1. This letter shall be provided to the landowner with copies to the NRCS engineer or representative at the pre-construction conference.

CONSTRUCTION NOTES

1. See attached NRCS Design and Construction Specification– Concrete Exhibit OH17-1 for slab, subgrade, and steel requirements.
2. Isolation joints shall be used where newly poured concrete abuts existing concrete or abuts to a different material such as buildings, posts, etc.
3. Construction joints shall be used when the concrete will harden between pours.
4. Unless otherwise noted, provide 2" cover over reinforcement steel and where concrete is cast against forms. Provide 3" cover over reinforcement steel where concrete is cast against earth or granular base surfaces.
5. Steel reinforcement shall not extend across contraction (control) joints.
6. Seal joints as required.
7. Cooperator shall notify NRCS 72 hours prior to concrete placement to inspect subgrade, forms and steel.

CONCRETE REQUIREMENTS

1. The maximum size aggregate (MSA) shall be 1.5 inches with a nominal maximum size aggregate (NMSA) of 1 inch. AASHTO M43 #57 aggregate will meet these requirements.
2. The maximum water to cement ratio (w/c) shall be 0.50 unless otherwise specified.
3. The concrete mix shall have a 28-day compressive strength of 4,000 PSI or greater.
4. The minimum cement content shall be 6 bags (564 lbs.) per cubic yard.
5. All concrete shall be air entrained with an air content of 4% to 8% of the volume of the concrete.
6. The slump shall be within the range of 3 inches minimum to 5 inches maximum.
7. Reinforcing steel shall be Grade 60.

REVISIONS		
DATE	APPROVED	TITLE
09/03	A.M. Brate	State Cons. Engineer
06/15	B.D. Jordan	St. Cons. Eng. (Acting)

Date
Designed
Drawn
Checked
Approved

TYPE S-3 CONCRETE SLAB

Client: _____ Location: _____ County, Ohio

United States Department of Agriculture
Natural Resources Conservation Service

File No.

Drawing No. OH-N-203-CAD

Sheet of